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EXAMINER

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1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3  
4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
6

7  
8 *Ex parte* TOSIYASU L. KUNII  
9

10  
11 Appeal 2009-011278  
12 Application 09/991,953  
13 Technology Center 3600  
14

15  
16 Before MURRIEL E. CRAWFORD, ANTON W. FETTING, and JOSEPH  
17 A. FISCHETTI, *Administrative Patent Judges*.  
18 FETTING, *Administrative Patent Judge*.

19 DECISION ON APPEAL<sup>1</sup>  
20

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

STATEMENT OF THE CASE<sup>2</sup>

Tosiyasu L. Kunii (Appellant) seeks review under 35 U.S.C. § 134 (2002) of a final rejection of claims 6-17 and 23-25, the only claims pending in the application on appeal. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b) (2002).

The Appellant invented a method, apparatus, system, database, or the like for supporting electronic commerce or any business using a network. Specification 1:12-17.

An understanding of the invention can be derived from a reading of exemplary claim 23, which is reproduced below [bracketed matter and some paragraphing added].

23. An electronic commercial transaction supporting method, comprising:

[1] providing an e-mall having at least one e-shop, including:

[a] an e-merchandise database, and

[b] an attribute correspondence table;

[2] recording, within the e-merchandise database, an initial set of product attributes associated with a plurality of products;

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<sup>2</sup> Our decision will make reference to the Appellant's Appeal Brief ("App. Br.," filed November 19, 2007) and Reply Brief ("Reply Br.," filed January 27, 2009), and the Examiner's Answer ("Ans.," mailed November 28, 2008), and Final Rejection ("Final Rej.," mailed April 19, 2007).

- 1        [3]    receiving a first customer query from a first e-customer  
2        via a network, said query including a set of first search  
3        attributes;
- 4        [4]    presenting, to the first e-customer, first product results  
5        including at least one product selected from the plurality of  
6        products, the first product results based on:
  - 7            [a]    the initial set of product attributes, and
  - 8            [b]    the first search attributes;
- 9        [5]    detecting if the first e-customer purchases a first product  
10       selected from the first product results;
- 11       [6]    determining if any attributes of the first search attributes  
12       did not previously exist in the attribute correspondence table,  
13       and for each such attribute:
  - 14            [a]    defining such attribute as a new attribute, and
  - 15            [b]    recording at least one new correspondence  
16            relationship between the new attribute and a product attribute  
17            that is associated with the first product in the attribute  
18            correspondence table; and
- 19       [7]    for at least one iteration:
  - 20            [a]    receiving a subsequent customer query from a  
21            subsequent e-customer, said subsequent customer query  
22            including a set of subsequent search attributes;
  - 23            [b]    presenting, to the subsequent e-customer,  
24            subsequent product results including at least one product  
25            selected from the plurality of products, the subsequent product  
26            results based on:
    - 27                [i]    the initial set of product attributes,
    - 28                [ii]   the subsequent search attributes, and
    - 29                [iii]   the correspondence relationships recorded in  
30                the attribute correspondence table;
  - 31            [c]    detecting if the subsequent e-customer purchases a  
32            subsequent product selected from the subsequent product  
33            results;

1 [d] determining if any attributes of the subsequent  
2 search attributes did not previously exist in the attribute  
3 correspondence table, and for each such attribute:

4 [i] defining such attribute as a new attribute,  
5 and

6 [ii] recording at least one new correspondence  
7 relationship between the new attribute and a product  
8 attribute that is associated with the subsequent product in  
9 the attribute correspondence table.

10  
11  
12 The Examiner relies upon the following prior art:

|               |                 |               |
|---------------|-----------------|---------------|
| Bauer et al.  | US 5,926,816    | Jul. 20, 1999 |
| Bowman et al. | US 6,169,986 B1 | Jan. 2, 2001  |
| Ng            | US 6,405,175 B1 | Jun. 11, 2002 |

13  
14 Claims 6-14 and 23-24 stand rejected under 35 U.S.C. § 103(a) as  
15 unpatentable over Bowman and Ng.

16 Claims 15-17 and 25 stand rejected under 35 U.S.C. § 103(a) as  
17 unpatentable over Bowman, Ng, and Bauer.

18  
19 ISSUES

20 The issue of whether the Examiner erred in rejecting claims 6-14 and 23-  
21 24 under 35 U.S.C. § 103(a) as unpatentable over Bowman and Ng turns on  
22 whether Bowman and Ng fail describe limitation [7][d][ii] of claim 23.

23 The issue of whether the Examiner erred in rejecting claims 15-17 and  
24 25 under 35 U.S.C. § 103(a) as unpatentable over Bowman, Ng, and Bauer  
25 turns on whether Bauer describes detecting contradicting correspondence

1 relations and keeping the more appropriate correspondence relation, while  
2 deleting the other correspondence, as required by claim 25, and whether a  
3 person with ordinary skill in the art would have been motivated to combine  
4 Bowman, Ng. and Bauer.

5

## 6 FACTS PERTINENT TO THE ISSUES

7 The following enumerated Findings of Fact (FF) are believed to be  
8 supported by a preponderance of the evidence.

### 9 *Facts Related to the Prior Art*

#### 10 *Bowman*

11 01. Bowman is directed to techniques for facilitating the process of  
12 refining search queries. Bowman 1:13-16. The refinement  
13 process is exemplified by a search engine used to assist customers  
14 of Amazon.com in locating products such as books and CDs.  
15 Bowman 5:9-12. Bowman describes a system where related terms  
16 are generated using query term correlation data based on historical  
17 query submissions to a search engine. Bowman 2:32-34. The  
18 query term correlation data is preferably based on the frequencies  
19 with which specific terms have been historically submitted  
20 together within the same query. Bowman 2:34-38. Each entry in  
21 the correlation table has two components, a key term and related  
22 terms. Bowman 7:1-4. Related terms list is a list of query terms  
23 that have appeared within the same query as the keyword with the  
24 highest degree of frequency and are ordered by frequency.

1 Bowman 7:4-7. A query correlation table is built using daily log  
2 files. Bowman 8:40-41. A user enters search terms for a product  
3 based on the title, subject, etc. Bowman 7:23-25. The web server  
4 applies the query to the bibliographic database and related term  
5 selection process and returns the query listing results to the user.  
6 Bowman 7:42-61. The table generation process maps each query  
7 key term to the related terms used in that particular query.  
8 Bowman 10:48-50. For example, a query of “Rough Guide to  
9 London” correlates the terms “Guide,” “to,” and “London” to the  
10 key term “Rough.” Bowman 10:57-64. Another example is the  
11 search for “Cosmos Astronomy,” where cosmos is in the title of  
12 the product and astronomy is the subject of the product. Bowman  
13 7:32-38. The system ignores unsuccessful query submissions,  
14 where a successful query submission results in which the item  
15 count is greater than zero. Bowman 10:1-12. In addition, the  
16 amount by which the correlation scores are incremented may be  
17 increased or decreased depending on different actions performed  
18 by the user, including the action of the user purchasing an item or  
19 adding the item to the shopping cart. Bowman 11:35-49. The  
20 correlation table merges daily log file results for a specified  
21 number of days and replaces the existing query correlation table.  
22 Bowman 9:52-53.

23 *Ng*

24 02. *Ng* is directed to a customer rewards program. *Ng* 1:10-12. *Ng*  
25 is concerned with providing users the ability to find products and  
26 price information in a simple manner. *Ng* 3:1-6. *Ng* describes a

1 system that includes a searchable database that contains  
2 information submitted by reward users and writes information to a  
3 target record after submission. Ng 3:23-28.

4 *Bauer*

5 03. Bauer is directed to a database synchronizer that facilitates the  
6 sharing of data in systems that have client-side and server-side  
7 applications that are not continuously connected to a single shared  
8 data source. Bauer 1:58-62. First, the client determines what  
9 modifications to the client data have taken place since the last time  
10 of synchronization. Bauer 2:7-9. Modifications include the  
11 creation of a new data item, an update to the value of an existing  
12 data item, and the deletion of a data item. Bauer 2:9-12. Second,  
13 modifications are propagated to the server, which has determines  
14 what changes have taken place to the server data since the last  
15 time of synchronization. Bauer 2:16-19. Third, the server detects  
16 data conflicts, resolves them, and propagates modifications back  
17 to the client. Bauer 2:19-21. Conflicts are resolved in favor of  
18 either the server or client so proper values are stored in the  
19 server's database. Bauer 4:10-12.

20  
21 ANALYSIS

22 *Claims 6-14 and 23-24 rejected under 35 U.S.C. § 103(a) as*  
23 *unpatentable over Bowman and Ng*



1 The Appellant first contends that Bowman and Ng fail to describe  
2 limitations [6] and [6][b] of claim 23. App. Br. 14-20 and Reply Br. 2-3.  
3 The Appellant specifically argues that Bowman and Ng fail to describe  
4 creating new relationships between new attributes and products based on a  
5 user's purchasing decision. App. Br. 16-19 and Reply Br. 2-3. We disagree  
6 with the Appellants.

7 The Appellant argues that the Examiner failed to map where Bowman  
8 describes each of the limitations of claim 23 and therefore we begin with an  
9 analysis of each of the limitations. App. Br. 15. Limitation [1] requires  
10 providing an e-mall having at least one e-shop including an e-merchandise  
11 database and an attribute correspondence table.

12 Bowman describes an e-mall, such as Amazon.com, that has a database  
13 of products and a correspondence table to assist users in searching for  
14 products. FF 01. Limitation [2] requires an initial set of product attributes  
15 associated with products. Bowman describes a correspondence table that  
16 has search terms associated to products. FF 01. The correspondence table  
17 includes product attributes, such as product title and product subject. FF 01.

18 Limitation [3] requires receiving a first customer query including a set of  
19 first search attributes. Bowman describes that a user enters search terms for  
20 products and includes product attributes such as the product title or subject.  
21 FF 01.

22 Limitation [4] requires presenting the results to the user based on the  
23 initial and search attributes. Bowman describes that a web server applies the  
24 search query to the bibliographic database and the correspondence table and  
25 returns the query results list to the user. FF 01.

1        Limitation [5] requires detecting if the user purchases a product from  
2        the results list. Bowman describes that the scores in the correlation table are  
3        adjusted based on a user's action, including the action of the user purchasing  
4        a selected item from the query result list. FF 01.

5        Limitation [6], [6][a], and [6][b] require determining whether the  
6        attribute did not previously exist in the attribute correspondence table,  
7        defining such an attribute as a new attribute, and recording at least one new  
8        correspondence relationship between the new attribute and a product  
9        attribute that is associated with the first product in the attribute  
10       correspondence table. Bowman describes that search queries are captured in  
11       daily log files and after a specified number of days the daily log file are  
12       parsed to create a new correspondence table. FF 01.

13       Since the correspondence table is created from the new daily log files, all  
14       of the new associations between the terms and products in the daily log files  
15       are new associations. Limitation [7] further requires iterations of limitations  
16       [1] – [6] including the newly associated terms and products. Bowman  
17       describes that all of these steps are repeated for a specified number of days  
18       until a new correspondence table is created. FF 01. As such, Bowman  
19       describes each of the limitations of claim 23.

20       The Appellant further argues that refining a search query is distinctly  
21       different from recording a new correspondence relationship between a new  
22       attribute and a product attribute because refining a search query only adds  
23       new related search terms that already have some relation to the search terms  
24       in the bibliographic database. App. Br. 18.

1        However, Bowman explicitly describes that a new correspondence  
2        relationships collected from daily log files replace existing relationships, as  
3        discussed *supra*. FF 01. Bowman further describes that the web server  
4        applies entered search terms against the bibliographic database *and* the  
5        correspondence table to determine the query results listing. FF 01. As such,  
6        each of the queries parsed in new daily log files is treated as a new attribute  
7        and a new relationship between the terms and products is created.

8        The Appellant also contends that Bowman and Ng teach away from the  
9        claimed invention. App. Br. 20. The Appellant specifically argues that  
10       Bowman fails to describe new attributes related to products, Bowman  
11       teaches away from a symmetric relationship in terms of correspondence  
12       between key terms and related terms, as required by claim 6, and Ng fails to  
13       describe the type of associations between attributes and products. App. Br.  
14       20 and 22-23. We disagree with the Appellants.

15       First, Bowman describes new attributes related to products as discussed  
16       *supra*. Furthermore, the Appellant's arguments only illustrate alleged  
17       deficiencies in Bowman (as discussed *supra*) and Ng (discussed *infra*) but  
18       fail to specifically provide any rationale as to why Bowman or Ng teach  
19       away from the claimed invention. As such, the Appellant's arguments  
20       regarding Bowman and Ng teach away from the claimed invention are not  
21       found persuasive.

22       The Appellant's contention that Ng fails to describe the type of  
23       associations between attributes and products is also not found to be  
24       persuasive because the Examiner has not relied on Ng to describe these  
25       features in the rejection of claim 23. As such, the Appellant is responding to

1 the rejection by attacking the references separately, even though the  
2 rejection is based on the combined teachings of the references.  
3 Nonobviousness cannot be established by attacking the references  
4 individually when the rejection is predicated upon a combination of prior art  
5 disclosures. *See In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir.  
6 1986).

7 The Appellant further contends that Bowman and Ng fail to describe the  
8 additional limitations of claim 24 and 6-14. App. Br. 21-23. We disagree  
9 with the Appellant.

10 The Appellant's arguments regarding the limitations in claims 24 and 6-  
11 14 are no more than general allegations that those limitations are not  
12 described by Bowman and Ng. "It is not the function of this court to  
13 examine the claims in greater detail than argued by an Appellant, looking for  
14 nonobvious distinctions over the prior art." *In re Baxter Travenol Labs*, 952  
15 F.2d 388, 391 (Fed. Cir. 1991). *See also In re Wiseman*, 596 F.2d 1019,  
16 1022 (CCPA 1979) (arguments must first be presented to the board). A  
17 general allegation that the art does not teach any of the claim limitations is  
18 no more than merely pointing out the claim limitations. A statement which  
19 merely points out what a claim recites will not be considered an argument  
20 for separate patentability of the claim. 37 C.F.R. § 41.37(c)(1)(vii).

21  
22 *Claims 15-17 and 25 rejected under 35 U.S.C. § 103(a) as unpatentable*  
23 *over Bowman, Ng, and Bauer*

24 The Appellant first contends that Bauer fails to describe detecting  
25 contradicting correspondence relations and keeping the more appropriate

1 correspondence relation, while deleting the other correspondence, as  
2 required by claim 25. App. Br. 24-27. We disagree with the Appellant.

3 Claim 25 requires detecting a mutually-contradicting correspondence,  
4 defining a false correspondence, and deleting the false correspondence from  
5 the attribute correspondence table. Bauer describes a database  
6 synchronization process that synchronizes data between a client and a server  
7 in a system where the client is not continuously connected to the data source.  
8 FF 03. Bauer further describes that the server detects conflicts in the data  
9 values between the client and the server and resolves these conflicts in favor  
10 of the client or server so that proper values are stored. FF 03. This implies  
11 that the incorrect or false data values are deleted such that only the correct  
12 data values are stored. As such, Bauer describes a database system that  
13 detects contradicting correspondence values and resolves these conflicts  
14 by keeping the correct value while deleting the false or incorrect value.

15 The Appellant further contends that a person with ordinary skill in the  
16 art would not have been motivated to combine Bowman, Ng, and Bauer and  
17 Bauer teaches away from Bowman and Ng. App. Br. 24-25. We disagree  
18 with the Appellant.

19 Bowman, Ng, and Bauer are all concerned with maintaining accurate  
20 information in a searchable database. FF 01-03. Bowman accomplishes this  
21 goal by generating a correlation table of terms of used in search queries to  
22 increase the accuracy of the results displayed to users. FF 01. Ng also  
23 solves this problem by providing a searchable database that includes  
24 information submitted by users. FF 02. Bauer further solves this problem  
25 by providing a database synchronizer that resolves conflicting data to

1 maintain accurate information in a server's database. FF 03. A person with  
2 ordinary skill in the art would have been motivated to combine these  
3 references in order to increase the accuracy of the content of the database  
4 and provide users with accurate database search results. As such, Bowman,  
5 Ng, and Bauer are concerned with the same problem and one of ordinary  
6 skill in the art would have been lead to combine their teachings.

7

### 8 CONCLUSIONS OF LAW

9 The Examiner did not err in rejecting claims 6-14 and 23-24 under  
10 35 U.S.C. § 103(a) as unpatentable over Bowman and Ng.

11 The Examiner did not err in rejecting claims 15-17 and 25 under  
12 35 U.S.C. § 103(a) as unpatentable over Bowman, Ng, and Bauer.

13

### 14 DECISION

15 To summarize, our decision is as follows.

- 16 • The rejection of claims 6-14 and 23-24 under 35 U.S.C. § 103(a) as  
17 unpatentable over Bowman and Ng is sustained.
- 18 • The rejection of claims 15-17 and 25 under 35 U.S.C. § 103(a) as  
19 unpatentable over Bowman, Ng, and Bauer is sustained.

20 No time period for taking any subsequent action in connection with this  
21 appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.  
22 § 1.136(a)(1)(iv) (2007).

23

Appeal 2009-011278  
Application 09/991,953

AFFIRMED

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2

3

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